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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,362	02/27/2002	Tetsuaki Suzuki	Q68702	9180

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EXAMINER	
YENKE, BRIAN P	

ART UNIT	PAPER NUMBER
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/083,362	SUZUKI ET AL.	
	Examiner	Art Unit	
	BRIAN P. YENKE	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE/Amendment (02/04/08)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-7,14-18,31,33-35,38 and 41-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5, 7, 15,18, 31, 35, and 41-42* is/are allowed.

6)☒ Claim(s) *6,14,16,17,33,34,38 and 43-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/04/08 has been entered.

Response to Arguments

1. Applicant's arguments repeating those previously filed (11/02/06 and 01/05/07) have been fully considered but they are not persuasive, in addition to the presently filed argument with respect to claim 49. The arguments with respect to newly added claim 49 are moot in view of the rejection, please see rejection below.

Applicant's Arguments

(From applicant's arguments 11/02/06)

a. Applicant states that Herman updates the correction amount of a color by detecting change of a scene shot based on the existence of the icon, and thus fails to teach or suggest updating the correction amount of quality of image.

b. Applicant states that Herman does not teach or suggest a histogram...as recited in claims 14 and 17.

(From applicant's arguments 04/05/07)

c. c. Applicant states that Herman performs color correction so that an objective color may become constant during the period when a certain object is displayed, therefore among the color compared in the color correction, one is the color of a picture on a display and the other is the color defined previously. The applicant states that the claimed invention of when switching scenes occurs, new color correction is performed by resetting color correction (updating of correction amount) after scene switching, and what is detected is the change of the image quality in a scene.

Examiner's Response

(From examiner's previous response 01/05/07)

a. The examiner disagrees. Herman discloses a system which performs color correction on selected scenes to maintain a constant color from scene shot to scene shot in the video image. Thus if the color is different from scene shot to scene shot, the quality would be low, thus Herman detects the color or an icon which may be a "network logo", "product trademark" or "known human face colors" to ensure the color of the scenes are maintained , which improves the quality. Therefore, if the colors between scenes are different, which is indicative of a change in image quality, the system corrects for such.

b. The examiner agrees, however the examiner relied upon applicant's own disclosure that histograms are/were known in the art in order to analyze color information, and since Herman's invention is geared towards the color correction where color may vary scene to scene, the use of such would have been an obvious modification as stated below.

(From examiner's previous response 04/19/07)

c. The examiner disagrees that Herman does not anticipate the claims as currently recited. It is noted that the claims do not recite resetting color correction, they do cite updating of correction amount. As stated in the rejection Herman discloses a system which ensures the colors between scenes are maintained to improve quality, wherein if the colors are different the system corrects for such, thus anticipating the claims as currently recited.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter.

Claim 38 recites a program for controlling a computer to execute video processing.

However, in order to comply with the 101 statute, language which is indicative of a computer-readable medium, having instructions stored thereon (or having encoded thereon), wherein the instructions cause the computer to execute.

The examiner notes MPEP 2106.1 which pertains to non-statutory subject matter, such as data structures/programs.

I. FUNCTIONAL DESCRIPTIVE MATERIAL: "DATA STRUCTURES" REPRESENTING DESCRIPTIVE MATERIAL *PER SE* OR COMPUTER PROGRAMS REPRESENTING COMPUTER LISTINGS *PER SE*

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such

claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material *per se* from claims that define statutory inventions.

Computer programs are often recited as part of a claim. USPTO personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material *per se* and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, USPTO personnel should treat the claim as a process claim. ** When a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim. **

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6, 16, 33, 38 and 43-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Herman, US 6,674,898.

In considering claims 6, 16, 33, 38 and 43-48

a) the claimed a correction amount...is met by TV set 300 which receives incoming video signals which are stored in frame buffer 350 which are scanned and compared to known pixel data by color correction controller 360 via known Table 370 (Fig 3).

b) the claimed image correcting means...is met by color correction controller 360.

c*) the claimed image input means*...is met by TV set 300 which receiving the incoming images which are frame stored in frame buffer 350 (Fig 3).

d) the claimed detecting means...is met where Herman discloses a system which corrects the color of the image from scene shot (cut point) to scene shot (cut point) by updating each frame individually, where the system performs color correction from scene to scene to maintain constant color.

In considering claim 49,

The claim calls for "subjecting an input moving image to quality improving correction processing "based" on a previously obtained correction amount.... which is disclosed by Herman, wherein based upon the frame, the scene to scene changes (or not) determined the amount of correction or not, where most notably the correction amounts of the frames are based upon stored correction data, and thus previously obtained correction amount, in order to ensure the icons which are the same are corrected the same amount, to ensure the scene to scene objects (which may be logos, trademarks or known human face colors, col 4, line 22-27).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14, 17 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Herman, US 6,674,898.

In considering claims 14, 17, 34

Herman does not explicitly recite a histogram. Herman discloses a system which utilizes known icons and true colors table in analyzing the received image data in accordance with known parameters in order to provide identical color information from scene to scene.

The use of a histogram is a conventional table/chart known in the art in order to analyze the color information of an image, as disclosed by AAPA.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Herman, which discloses the correction/analysis of the received signals color information by using a true color table, by also utilizing a histogram to correct/analyze the color, since such a table/chart is conventional and readily available for such comparison/correction.

Allowable Subject Matter

5. Claims 5, 7, 15, 18, 31, 35, 41 and 42 are allowed.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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(TDD) 703-305-7785

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For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and applications. The tools currently available in the Patent EBC are Patent Application Information Retrieval (PAIR) and the Electronic Filing System (EFS). PAIR (http://pair.uspto.gov) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in

electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.

B.P.Y
30 February 2008

BRIAN P. YENKE
PRIMARY EXAMINER